

### **Abstract**

A computerized system and method for transforming (formatting or aggregating) the results of a query into a hierarchical information stream, such as an eXtensible Markup Language (XML) data stream is disclosed. A database server receives a query and generates a rowset. A rowset processor, using the mode specified in the query, processes the rowset and query to generate the XML data stream. For the "auto1" mode, the rowset processor transforms a rowset into an XML data stream using primary-foreign key information specified in the query to determine nesting. For the "auto2" mode, the rowset processor transforms a rowset into an XML data stream using table ordering information included in the query to determine nesting. For the "explicit" mode, the rowset processor transforms a rowset into an XML data stream using the explicit organizational information specified in the query. In one embodiment, it is easier for a developer to compose expressions to generate nested hierarchical structures than previous formulations and simpler semantics are provided without implicit hierarchy inference. The syntax of an embodiment of the hierarchical formatting function includes optional arguments including a name option, a root option, map option, namespace options and a null option.